

Dean Gunnar Hoffman (8 May 1949 – 11 November 2022)

Dean Hoffman was a caring mentor, an insightful mathematician, an intense backgammon player, an engaging speaker, and a very effective teacher.



He received a BA from Union College in 1970, began graduate studies at University of Michigan, and earned a PhD from University of Waterloo in 1976 under David Klarner and Ron Mullin. He began work at Auburn University in 1977 and was still mentoring students at the time of his passing. He directly supervised over 20 PhD students, but inspired, mentored, and motivated hundreds more. His teaching style was both traditionally engaging and unique to him – many of his former students have adopted components of his classroom presence.

Dean Hoffman's published research includes over a hundred papers, chapters, and books on graph theory, design theory, number theory, and puzzles. More likely, he will be remembered by his collaborators for his unscheduled calls, emails, faxes, and visits with surprising and sudden one-page responses to some of the most difficult and fiddly details. He found joy in discovering and sharing results in many different formats – for example, he had a beautiful pair of orthogonal latin squares of order 10 that he had painted and hung in his living room.

Early in his career, he invented the Hoffman packing puzzle – one takes a set of 27 identical cuboids with sides of length a , b and c , and rotates them to fit in a larger cube of side length $a + b + c$. The puzzle itself is both beautifully intricate and beautifully simple, and like many of Hoffman's questions, has spawned further questions. Many of his later puzzles were contextual to classes he was teaching or papers he was collaborating on, and folks often solved them for small cash prizes and large bragging rights.

Many collaborators and graduate students have fond memories of meeting up after a seminar or day of classes to listen to him play his antique steel guitar or play backgammon. Dean Hoffman leaves behind his wife Dr Gail Coblick Hoffman, sons Noel and Ian (Melanie) and grandson Beckett.

— Sarah Heuss Holliday